

REMARKS

Pending Claims:

Claims 19, 23-26 are pending in the case. Claim 19 has been amended to address the claim objection set forth in Examiner's paragraph one and additional amendments have been made to the remaining claims to further clarify the structural features. In the Applicant's invention as set forth the specification relies on a wall attachment affect which occurs when a fluid emerges from an aperture slit or hole adjacent a barrier surface which limits entrainment of ambient fluid on that side of the jet. This asymmetrical nozzle structure is present in every embodiment of Applicant's invention set forth in this application, and that geometry is not present in any of the applied references.

When the fluid is ejected from Applicant's asymmetrical nozzle structure it has an initial momentum in a direction which corresponds to the aperture. This flow, once it is outside the catheter, turns. This turning is caused by fluid interaction between the emerging jet and the ambient fluid in the vessel. The pressure on the control body surface immediately adjacent the aperture prevents fluid from joining in the emerging flow and this area quickly forms a low pressure zone. The higher pressure on the other side of the jet pushes the jet toward the wall. In the Applicant's invention this means that fluid emerging from the slits, apertures or holes in the catheter flow retrograde along the length of the catheter body. To advance prosecution and to very clearly distinguish over the prior art references, Applicant has amended his claim to call for substantially lateral injection of the fluid.

Applying the references, Applicant wishes to point out that the Pilgrim '418 patent does not exhibit wall attachment structures or effects and that the retrograde flow of fluid in the device is driven by a hook like nozzle which simply mechanically turns the jet 180 degrees so that it squirts "backwards." Although this is not a teaching of a wall attachment structure or nozzle, Applicant distinguishes the present amended claims over this reference by pointing out that the claim now requires lateral injection rather than injection near "0 degrees" as that term is defined in the claim.

With regard to the Dierker '541 patent there is lateral injection through hole 32 when it is advanced to location 37. Applicant notes that the device is operated when the ports or apertures 32 are in the extended position shown as 37 in Fig. 2 providing the fluid flow shown in Fig. 1. There is no control body in this configuration best

illustrated by Fig. 5 and there is no turning of the jet associated with the wall attachment or Coanda effect.

The Muto '216 reference describes an irrigation device with both injection and suction being supplied at the same time, and no lateral injection.

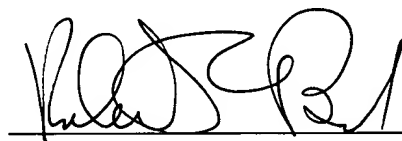
Applicant has amended his claim to call for lateral injection at substantially lateral direction more specifically between the angles of 45 and 90 degrees, and expressly calls for a controlled body not seen in the applied references and not seen in Dierker '541.

Kindly reexamine the amended claims in light of these comments.

CONCLUSION

All of the claims remaining in this application should now be seen to be in condition for allowance. The prompt issuance of a notice to that effect is solicited.

Respectfully submitted,
SPRITE SOLUTIONS
By its attorneys:



Robert C. Beck
Registration No. 28,184
Beck & Tysver, P.L.L.C.
2900 Thomas Ave., #100
Minneapolis, MN 55416
Telephone: (612) 915-9635
Fax: (612) 915-9637

Date: _____

6/25/04